Generator 10 is energized by pressurized air received through inlet flow path, generally designated 30, from an air supply passage 12. Supply passage 12 may be connected to a conduit 11 which contains pressurized air. Conduit 11 may, for example, be the brake air line of a railway vehicle. Inlet flow path 30 is in fluid communication with cylinder 18 at a first end 17 of cylinder 18. Preferably, a filter 14 is included in inlet flow path 30 to keep dirt out of generator 10. Also, a choke 16 is, preferably, included in inlet flow path 30 to control the pneumatic impedance of inlet flow path 30.

When piston 21 is disposed in cylinder 18 and air is supplied through inlet flow path 30[.], [Air] air pressure rises in cylinder 18 and forces piston 21 out of cylinder 18 to the position shown in Figure 3. In this position, there is a gap 31 between piston 21 and cylinder 18. The pressure of air in cylinder 18 then drops and spring 24 forces piston 21 back into cylinder 18. This cycle is repeated, so piston 21 oscillates, moving in and out of cylinder 18. Piston 21 has a magnetic moment associated therewith, as suggested by indicia 39. At least one electric coil 26 experiences an induced emf due to the changing magnetic flux caused by the oscillating magnetized piston 21. Coil 26

preferably is connected to a rectifier 50 to convert the alternating emf provided by coil(s) 26 to DC electric power on terminals 53. The DC power available on terminals 53 may be used to power a battery (not shown) and/or to power electronic systems (not shown) on a railway vehicle (not shown).